Inverse Variation

An equation is said to be an Inverse Variation if it can be written as

$$y = \frac{k}{x} \quad \text{or} \quad yx = k$$

Where k = a constant of proportionality.

Examples of Inverse Variation:

① $t = \frac{40}{u}$ ② $p = \frac{1}{4q}$

Write the following inverse variation equations using the language of direct or inverse variation.

① $t = \frac{40}{u}$

The variable t is inversely proportional with u with a constant of 40

② $P = \frac{1}{4q}$

The variable P is inversely proportional to q with constant of $\frac{1}{4}$.

How we know it is an inverse variation function vs a direct variation function:

1. The variable is in the denominator.